

**REMARKS****Discussion of Claim Rejections under 35 U.S.C. 102(e)**

The Examiner rejected Claims 1 and 3 under 35 U.S.C. 102(b) as being anticipated by Robinson et al. (6,843,010).

In response, Applicant respectfully disagrees with the Examiner. To clarify the inventive points of the present invention, however, Applicant has amended Claims 1 and 3 with limitations from the original Specification and Drawings.

**Robinson's Disclosure**

Robinson discloses a sign with photo-luminescent and current-generated lighting including a light-conductive and transparent front panel (12), etched characters (22) formed on a rear surface (17) of the front panel (12), photo-luminescent characters (16), and a light emitting diodes (14). The etched characters (22) are illuminated by the light (14), which illumination is reflected forwardly through the transparent front panel (12) to provide guidance to those to whom the present exit sign is visible and rearwardly to energize the photo-luminescent characters (16). (See, e.g., Abstract, col. 2, lines 41-45).

**Claim 1**

Claim 1 of the present invention reads as follows (emphasis is added);

1. A guide and instruction plate, comprising:
  - a plate implemented in such a manner that aluminum, steel, copper, alloy plate, etc., after removing of anti-rust oil (lubricant), are preprocessed for an easier adherence, and a primary coat enamel and a secondary coat enamel are processed;
  - a ground surface disposed on the plate and processed with non-photo luminescent porcelain enamel; and
  - one or more pattern surfaces disposed on the plate and comprising character, number, symbol, graphic, and image molded with photo luminescent porcelain enamel.

Claim 1 of the present invention is directed to a photo luminescent porcelain enamel for an instruction plate and a signage, which comprises a plate, a ground surface, and pattern

surfaces. The pattern surfaces are processed with photo luminescent porcelain enamel and the ground surface is processed with non-photo luminescent porcelain enamel. Since the surfaces are processed with photo or non-photo luminescent porcelain enamels, the device achieves function of luminescent sign without an internal light source and is enhanced with a fire resistance, a heat resistance, a water proof, and a durability. (See, e.g., Abstract; Fig. 1; lines 1-10, Paragraph [0006]).

In contrast, Robinson's device needs a light source (14) to illuminate the characters (16). Further, Robinson's device must include a light-conductive and transparent front panel (12) to provide lights from the light source (14) to the characters (16).

In the present invention, the device does not need such elements: the pattern surfaces does not have to be illuminated by an internal light source, and therefore anything like the front panel is not necessary. The photo or non-photo luminescent enamels are tough enough, such that any further protective or light-guiding transparent front panel is not needed as in the cited references.

Robinson does not anticipate, teach, or suggest the porcelain enamel type materials for the pattern or ground surfaces.

Therefore, the distinctness of the present invention from the cited reference by Robinson is clear and apparent in the elements, structure, functions of the invention.

Applicant respectfully request withdrawal of the rejections.

### Claim 3

In response, Applicant has amended Claim 3.

For the similar reasons, Applicant respectfully submits that Claim 3 of the present invention is not anticipated by Robinson et al.

Applicant respectfully request withdrawal of the rejections.

### Discussion of Claim Rejections under 35 U.S.C. 103(a)

The Examiner rejected Claims 2 and 4 under 35 U.S.C. 103(a) as being unpatentable over Robinson, and further in view of Rohne et al. (6,658,773).

In response to these rejections, Applicant has amended Claims 2 and 4. Also, Applicant respectfully submits that the amended claims are distinctly different from the cited references singly or in combination.

Law of Obviousness

The Patent and Trademark Office has the burden under section 103 to establish a *prima facie* case of obviousness. *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-87 (Fed. Cir. 1984). To establish a *prima facie* case of obviousness, three basic criteria must be met: first, the prior art reference (or references when combined) must teach or suggest all the claim limitations; second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; finally, there must be a reasonable expectation of success. *See* M.P.E.P. § 2143.

Claims 2 and 4 are directed to a guide and instruction plate similar to the features of Claim 1.

As discussed in relation to Claim 1, Robinson does not anticipate Claims 2 and 4.

Further, Rohne does not remedy the deficiency of Robinson.

Rohne discloses a label with luminescence inside, which includes a first layer of plastic vinyl having a printed luminescent paint or ink on top and a second layer of transparent plastic vinyl covering the luminescent layer. (See, e.g., Abstract, Figs. 1 and 5).

Rohne's opaque character (18) is embedded in the luminescent ink layer (16). And, they are covered by another layer, the cover (20). That is, again the opaque character (18) and the luminescent ink layer (16) are covered by another layer and neither includes photo-luminescent enamel. (See, e.g., Fig. 5 and col. 3, lines 51-64).

Applicant respectfully submits that these features are not taught or suggested by the cited references.

Therefore, since the combination of the references does not teach all of the claimed limitations, Robinson and Rohne cannot establish a *prima facie* case of obviousness. Applicant respectfully submits that the amended Claim 2 and 4 are patentable over Robinson and Rohne alone or in combination.

Discussion of Claim Rejections under 35 U.S.C. 103(a)

The Examiner rejected Claim 6 under 35 U.S.C. 103(a) as being unpatentable over Robinson, and further in view of Powers et al. (4,685,984).

In response to these rejections, Applicant has amended Claim 6.

The Examiner stated “Powers disclosed the concept of a character, number, symbol, graphic image, pattern, etc. (indicia, 10) that is processed using a heat transfer printing paper.”

For similar reasons as in Claim 1, Robinson does not teach or suggest all the features other than “using a heat transfer printing paper”.

Further, Powers does not remedy the deficiency of Robinson since the indicia (12) is buried deep below the thermoplastic elastomer layer (16) and the indicia carrier layer (14), which is distinctly different from the invention.

In addition, Applicant respectfully submits that a process for transferring indicia from paper to a fabric backing member such as a T-shirt as in Powers in a temperature of about 365 degrees in Celsius or lower is quite different from a process for transferring patterns to a coat enamel as in the present invention, in which the heat transfer printing comprises porcelain enamel and needs to be processed and attached in a temperature of 750~830 degrees in Celsius. Therefore, Applicant respectfully submits that Powers’ disclosure about the heat transfer printing paper for a paper of fabric teaches or suggests the disclosure of the present invention which requires totally different processing temperature and material.

The applicant respectfully submits that the amended Claim 6 is patentable over Robinson and Powers alone or in combination.

#### **Discussion of Claim Rejections under 35 U.S.C. 103(a)**

The Examiner rejected Claim 5 under 35 U.S.C. 103(a) as being unpatentable over Robinson, and in view of Rohne, further in view of Powers.

In response to these rejections, Applicant has amended Claim 5.

The Examiner stated that Rohne et al. discloses the concept of a ground surface (sheet, 14) that is processed with photo luminescent enamel (luminescent ink, 16). As discussed above, however, Applicant respectfully submits that the luminescent ink (16) of Rohne is distinctly

different from the photo luminescent enamel of the invention. Also, Powers does not remedy the deficiency of Robinson or Robinson and Rohne alone or in combination as discussed regarding to Claim 6 in the above.

Therefore, the applicant respectfully submits that the amended Claim 5 is patentable over Robinson and Powers alone or in combination.

### CONCLUSION

The applicant believes that the rejections were obviated by the amendment of claims, and the application is now in condition for allowance: therefore, reexamination, reconsideration and allowance of the claims are respectively requested. If there are any additional comments or requirements from the examination, the applicant asks for a non-final office action.

The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or credit any over-payment to Deposit Account No. 16-0310.

Very truly yours,

Park Law Firm



By: \_\_\_\_\_

Choongseop Lee

Regis. No. 57,051

3255 Wilshire Blvd., Suite 1110  
Los Angeles, California 90010  
Tel: (213) 389-3777